IT Unit 3

Topic 2

# Ch 2, Data Analytics: Drawing Conclusions, Part 1

**Solution specifications** (Informatics, p 78)

The SAT comprises 2 solutions:

The solution for Unit 3, Outcome 2 is the information you create from the data you collect and analyse. This information is used to support or refute your hypothesis.

The solution for Unit 4, Outcome 1, is the multimodal online solution, (MMOS) that communicates your findings about the hypothesis.

In creating the solutions for the SAT you will be using the PSM to guide the development.

**Analysis Stage:**

**Solution Requirements:**

**Functional requirements**

1. What do you understand by “functional requirements” of the solution?

* Descries the tasks that your solution should be able to perform. In the simplest terms, these are things you want your solution to be able to do.

1. What will the main functional requirement be of your Outcome’s information?

* It lets you reach a valid and substantiated conclusion as to whether your hypothesis is supported or refuted.

**Non-Functional requirements**

1. Explain what is meant by non-functional requirements of the solution.

* A non-functioning requirement will probably not be achieved in one specific place in a solution

**Data requirements**

1. What steps need to be performed on data to help support your hypothesis?

* The specifications you write for your solution must include a description of the data that you require to support your hypothesis, you must locate this data for your outcome

**Constraints, p 80**

1. What are constraints on a solution? Give an example of each of the following five categories of constraints:

* Constraints are limiting factors or conditions you need to consider when you are designing a solution.
  1. Economic
* Cost, Time
  1. Technical
* Speed of processing, capacity, availability of equipment, compatibility and security
  1. Social
* Level of expertise of users
  1. Legal
* Ownership, privacy of data requirements
  1. Useability

Usefulness, ease of use of solution

**Scope, p 81**

1. What does the scope of a solution refer to?

* Identify what your solution will be and what you expect it to achieve.

1. Why is it important to define the scope?

* What is includes so that the information you produce does not go beyond the scope.

1. What is the scope of a solution largely defined by?

* Its functional and non-functional requirements, and may include lists of functions that’s are not required.